

DATA ANALYSIS

A chit fund has 25 members. Each month they contribute Rs 2000 each. End of the month, the person who bids the lowest for the corpus, gets his bid. The group organizer gets paid a fixed commission of Rs 2500 each month (5% of 25×2000). It is deducted from the bid winner's corpus. The remaining amount is distributed among all the 25 customers equally. **Enclosed excel has the table with cashflows for each month.**

Task :

- What is the Annualized Return of the person who bids in the last month ?
- What is the Annualized Return of the person who bids in the first month ?
- Write an R/Python script which calculates the annualized return of chit fund participant ?- Show the Return % for each month's bid winner.

SAMPLE DATA:

: df						
	Month	Contribution	Amount won by the bidder	Chit fund organizer commission	Net amount recd by Bid winner	Amount returned to everyone in the group
0	1	2000	40000	2500	37500	400
1	2	2000	42000	2500	39500	320
2	3	2000	45000	2500	42500	200
3	4	2000	48000	2500	45500	80
4	5	2000	40000	2500	37500	400
5	6	2000	42000	2500	39500	320
6	7	2000	43000	2500	40500	280
7	8	2000	44000	2500	41500	240
8	9	2000	40000	2500	37500	400
9	10	2000	42000	2500	39500	320
10	11	2000	45000	2500	42500	200
11	12	2000	48000	2500	45500	80
12	13	2000	40000	2500	37500	400
13	14	2000	42000	2500	39500	320
14	15	2000	43000	2500	40500	280
15	16	2000	43000	2500	40500	280
16	17	2000	41000	2500	38500	360
17	18	2000	42000	2500	39500	320
18	19	2000	45000	2500	42500	200
19	20	2000	45000	2500	42500	200
20	21	2000	44000	2500	41500	240
21	22	2000	46000	2500	43500	160

What is the Annualized Return of the person who bids in the last month ?

Calculate total return and annualized return. Print the amount of the person who bids in the last month

```
In [82]: print('Annualized Return of the person who bids in the last month: {}'.format(list(df['Annualized return'])[-1]))
```

Annualized Return of the person who bids in the last month: 25776.0

What is the Annualized Return of the person who bids in the first month ?

Calculate total return and annualized return. Print the amount of the person who bids in the first month

```
In [83]: print('Annualized Return of the person who bids in the first month is: {}'.format(list(df['Annualized return'])[0]))
```

Annualized Return of the person who bids in the first month is: 20976.0

Write an R/Python script which calculates the annualized return of chit fund participant ?-

Show the Return % for each month's bid winner.

```
In [84]: print('Return % for each month's bid winner %' % return % each month's bid winner %)
```

Return % for each month's bid winner 0 87.4

1 91.4

2 97.4

3 103.4

4 87.4

5 91.4

6 93.4

7 95.4

8 87.4

9 91.4

10 97.4

11 103.4

12 87.4

13 91.4

14 93.4

15 93.4

16 89.4

17 91.4

18 97.4

19 97.4

20 95.4

21 99.4

22 101.4

23 103.4

24 107.4

Name: Return % each month's bid winner, dtype: float64

In []: